

Your group is planning a visit to the Chula Vista Nature Center that may include lunch. We suggest a Zero Waste Picnic, practicing the three R's (Reduce, Reuse, Recycle) during your Nature Center experience.

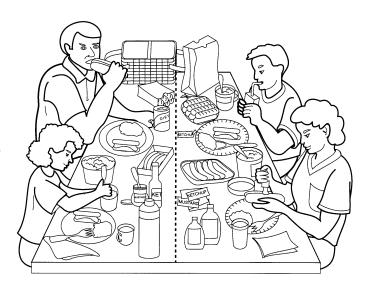
The National Park Service has a goal of reducing total solid waste by 5% from the year 2000 level, and California State guidelines require diverting 50% of solid waste before it reaches landfills by the year 2010.

The objective for a Zero Waste Picnic is to plan and enjoy a picnic meal using a minimum of disposable items. Use the recycling bins located in picnic and parking areas, and take home any leftover food.

Thank you for voluntarily participating in our Zero Waste Picnic program. With your help, we are contributing toward a sustainable planet while helping to meet our goals of reducing waste and increasing recycling at the Chula Vista Nature Center. We welcome your comments and suggestions.

#### DO BRING

- \* Reusable plates, cups and utensils
- \* Containers for leftovers



### **DON'T BRING**

- \* Disposables
- \* Unnecessary packaging

Which picnickers have the more Earth-friendly lunch?

# **Zero Waste Lunch**

# **开**

# **Subject(s):**

Math, Science

#### **Materials:**

Three large buckets, cans, boxes or trash bags (at least one should be sealable).

# **Objectives:**

- 1. Students will be able to identify and describe ways to reduce waste/garbage created during meals.
- 2. Students will be able to plan and enjoy a picnic lunch using a minimum of disposable items.
- 3. Students will assist in the **reduction**, by 5%, of the overall amount of garbage/waste generated from meals at the Chula Vista Nature Center.
- 4. Students will assist in the **recycling/reusing** at least 50% of the material mentioned in objective

# **Background Information:**

In 1999, U.S. residents, businesses, and institutions produced more than 230 million tons of municipal solid waste, which is approximately 4.6 pounds of waste per person per day, up from 2.7 pounds per person per day in 1960. Recycling is one of the best environmental success stories of the late 20th century. Recycling, including composting, diverted 64 million tons of material away from landfills and incinerators in 1999, up from 34 million tons in 1990. By 1999, more than 9,000 curbside collection programs served roughly half of the American population. Curbside programs, along with drop-off and buy-back centers, resulted in a diversion of 28 percent of the nation's solid waste. Additional information is available at: www.epa.gov/epaoswer/non-hw/muncpl/reduce.htm

#### **Overview:**

Chula Vista Nature Center's concern for a sustainable planet has compelled the site to adopt a goal of **reducing** the overall amount of waste generated in the park by 5%, including recyclables, and **recycling/reusing** at least 50% of that. In an effort to attain this goal, the Nature Center has implemented a new environmental education curriculum known as a "**Zero Waste Lunch.**" A "Zero Waste Lunch" is a lunch packed so that there will be as little garbage left over as possible. For example: bringing cloth napkins and reusable eating utensils, putting food in reusable plastic containers when possible, and using a thermos for juice, water or milk.

These activities will raise students' awareness regarding the amount of garbage they can generate in one small part of their day and reinforce the idea that students can make personal choices about their actions and have positive impacts on the environment.

# Vocabulary:

1. Biotic Of or relating to life.

2. Commingle To mix in one mass or group, to blend.

3. Compost A mixture of decaying organic matter, as from leaves and manure, apple cores,

orange or banana peels, coffee grounds and filters, used to improve soil

structure and provide nutrients.

4. Disposable Designed to be used once and then thrown away.

5. Environmental Education The field of study that deals with the complexity of physical, chemical, and

biotic factors (as climate, soil, and living things) that acts upon an organism to

ultimately determine its form and survival.

6. Recycling To adapt to a new use.

7. Sustainable A method of harvesting or using a resource so that the resource is not depleted

or permanently damaged.

8. Zero Waste Lunch A lunch using a minimum of disposable items or creating a minimum of

waste/garbage.

#### **Procedure:**

#### **Before your visit:**

- 1. Discuss with students what they normally pack in their lunches and what leftovers are thrown in the garbage. Ask if any of their "garbage" could have been reused or recycled. Brainstorm examples of items that can be reused (e.g., silverware instead of plastic spoons and lunchboxes instead of paper lunch bags).
- 2. Discuss Zero Waste Lunches in your class, stressing that no garbage should be generated from this meal.
- 3. Discuss the practice of composting and, if your principal approves, start a school compost pile for use in a school or community garden.
- 4. For students who bring their lunches, please send the attached letter to parents/guardians to request their assistance in a Zero Waste Lunch at the Chula Vista Nature Center (this letter can be combined with the field trip permission slip). For school-provided lunches, discuss with your district ways to reduce lunch waste.
- 5. Obtain three large buckets, cans, boxes, or trash bags (at least one should be sealable). Mark the first "Containers", the second (sealable) "Compost" and the third "Other".

# The Field Trip Picnic:

- 1. Ask the students not to put any of their lunch items in the Nature Center's trashcans (nor leave anything outside the cans).
- 2. When students are finished with lunch, ask them to put anything they have left into the appropriate container:
  - a. In their pack to take home items to be reused (i.e., utensils, thermos).
  - b. In the "Containers" bucket the commingled recyclables.
  - c. In the "Compost" bucket any food scraps (nothing else, of course).
  - d. In the "Other" bucket whatever doesn't fit in the other categories (very little!)
- 3. Estimate the weight of the contents in each bucket. Discuss your results and how you could improve even more.
- 4. Place the items from the "Containers" bucket into a recycling bin for recycling.
- 5. The "Compost" bucket should be taken to the school's compost pile or deposited in the Nature Center's compost pile.
- 6. If there is anything in the "Other" bucket, empty it into the Center's waste receptacle or take it back to your school for disposal.

#### After your visit:

- 1. Conduct another Zero Waste Lunch at school after your field trip to the Chula Vista Nature Center and compare these new results to assess if less waste was generated.
- 2. Invite other classes to join your class in a school-wide Zero Waste Lunch program.

Thank you for your voluntary participation in the Chula Vista Nature Center Zero Waste Lunch program. With your help, the Nature Center will be able to meet its goals of reducing waste and assisting in maintaining a sustainable planet.

If you have any comments or suggestions regarding this program or curriculum, please let us know during your visit or mail it to: Chula Vista Nature Center, 1000 Gunpowder Point, Chula Vista, CA 91910

"Use it up, wear it out, make it do or do without!"

-New England Proverb

"Treat the earth well, for it was not given to you by your parents, it was loaned to you by your children."

- Native American Proverb

"Eventually we'll realize that if we destroy the ecosystem, we destroy ourselves."

- Jonas Salk

"Our youth are our gifts and if we do not entrust them with the best care we can give them, then our nation is lost."

- African Proverb

#### **Dear Parent or Guardian:**

As part of our field trip to Chula Vista Nature Center on

, we are planning a "Zero Waste"

**Lunch"**. We have discussed ways to pack a lunch so that there will be as little garbage left over as possible. For example, we recommend bringing cloth napkins and reusable eating utensils, putting food in reusable plastic containers when possible, and using a thermos for juice, water or milk. Please help your child pack a Zero Waste Lunch for the picnic.

This lunch will be part of our lesson about recycling and waste reduction. We will recycle as much as we can after we eat, including cans and glass bottles.

Leftover food that can't be saved will be composted.

## Thank you for your help with this important project!

Treat the earth well,
for it was not given to you by your parents,
it was loaned to you by your children.
-Native American Proverb

Eventually we'll realize that if we destroy the ecosystem, we destroy ourselves.

-Jonas Salk



# Querido Padre O Guardián:

Como parte de nuestra excursión al El Centro de la Naturaleza el día

, estamos planeando un "Almuerzo con

Cero Deshechos." Hemos hablado de diferentes maneras de preparar un almuerzo para que quede la menor cantidad de basura posible. Por ejemplo, recomendamos que traigan servilletas de tela y cubiertos que se pueden volver a usar; se puede poner la comida que sobra en recipientes plásticos reusables cuando es posible y se puede usar un termo para el jugo, agua o leche. Favor de ayudar a su niño empacar un almuerzo con cero deshechables.

Este almuerzo sera una parte de nuestra lección sobre el reciclaje y la reducción de deshechos. Reciclaremos lo más que se puede después de que comamos. Los botes y las botellas de vidrio/plastico serán reciclados. La comida que sobra que no se puede guardad, sera compostadad.

# ¡Gracias por su ayuda con este proyecto importante!

Trata el planeta con respecto, cual no fue obsequio de tus padres, fue únicamente prestado por tus hijos. -Nativos de América proverbio

Eventualmente, podemos realizar lo que destruimos en el ambiente, nos destruimos así mismo nosotros. -Jonas Salk

